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(72) Inventors: **HARGRAVES, Donald, Edwin** [US/US];  
14100 Wynfield Creek Parkway, Huntersville, NC 28078  
(US). **CURTIS, Douglas, Allan** [US/US]; 143 Denlon  
Lane, Troutman, NC 28166 (US).

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(74) Agents: **ADAMS, W., Thad, III** et al.; Adams Evans P.A.,  
2180 Two Wachovia Center, Charlotte, NC 28282 (US).

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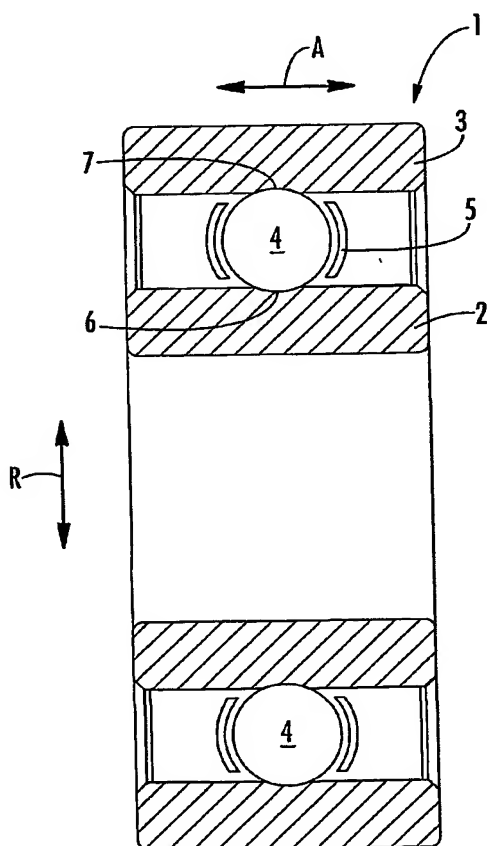
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(71) Applicant (*for all designated States except US*): **HAR-  
GRAVES TECHNOLOGY CORPORATION** [US/US];  
127 Speedway Drive, Mooresville, NC 28117 (US).

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(54) Title: PUMP MOTOR WITH BEARING PRELOAD



(57) Abstract: A electrical machine includes a housing assembly, first and second bearings mounted in the housing assembly, and a rotor assembly mounted in the bearings such that it has a predetermined amount of axial and radial play relative to the housing. A biasing element is disposed between one of the rotor assembly or the housing and one of the bearings. The biasing element urges the rotor assembly to a preloaded position which eliminates the axial and radial play. Each of the first inner and outer races and the second inner and outer races are secured to one of the rotor assembly or to the housing, such that the rotor assembly is retained in the preloaded position. The components of the electrical machine are chosen such that this preload is maintained over the operating temperature range of the machine.

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